Prenatal Care

Definition: Comprehensive medical care provided during pregnancy, labor and delivery, and postpartum. Services include screening for medical and behavioral high risk factors known to cause poor outcomes and treatment for those conditions. First trimester is the first 3 months of pregnancy.

Summary

In 1994, 82.6% of pregnant women in Washington state entered prenatal care during the first trimester of pregnancy. Nationally, the figure was 79% in 1993. Early and continuous prenatal care is considered the best mechanism for preventing the avoidable causes of maternal and infant illness and death.[1] The US Public Health Service recommends a broad view of care which includes education on healthful behaviors and nutrition.

Time Trends

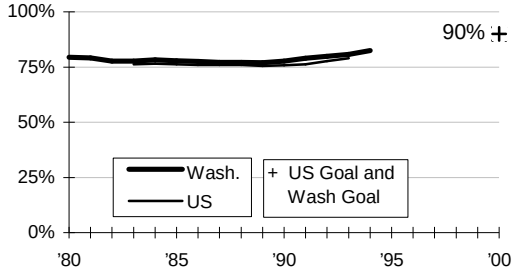
In Washington, the proportion of women entering prenatal care in the first trimester has gradually increased since 1989. While all racial/ethnic groups have experienced increases in the proportion of mothers receiving first trimester prenatal care, disparities among racial and cultural groups remain.

Year 2000 Goal

Washington's goal for the year 2000 is to increase the percentage of all pregnant women who receive prenatal care in the first trimester to 90%. Among certain racial and ethnic groups, the goal will not be met. As Washington continues to approach the year 2000 goal, more effort may be needed to further increase early entry into prenatal care by reaching high-risk, hard-to-reach women.

Prenatal Care

Percent of Pregnant Women Entering Prenatal Care in 1st Trimester, with Year 2000 Goals



Geographic Variation

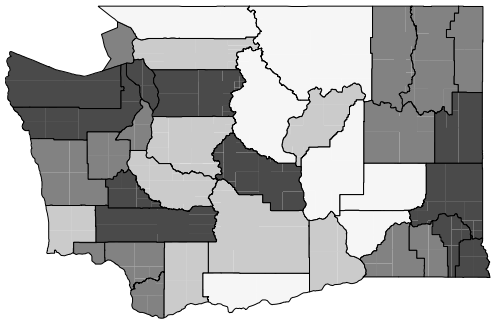
A comparison of the most recent national data (1993) indicates 79% nationally for first trimester entry into care, compared to Washington's 80.8% for the same year.

Combining 1992-1994 data, the counties with the highest percent of women entering prenatal care in the first trimester were Island, Kittitas, Spokane, Whitman, Thurston, Asotin, Garfield, Jefferson, Lewis, and Snohomish. The counties with the lowest were Franklin, Grant, Okanogan, Whatcom, Adams, Chelan, Klickitat, Douglas, Yakima, and Benton.

Many rural counties in Washington have low rates of early entry to prenatal care. The central region of the state, which is primarily rural, has the lowest percent of women receiving first trimester prenatal care, 76%; all other regions are at 81% or above. Women living in rural communities may have decreased access to services due to lack of providers and transportation, often compounded by very low income.

Prenatal Care, 1992-1994

Percentage of Mothers Receiving Care in the 1st Trimester



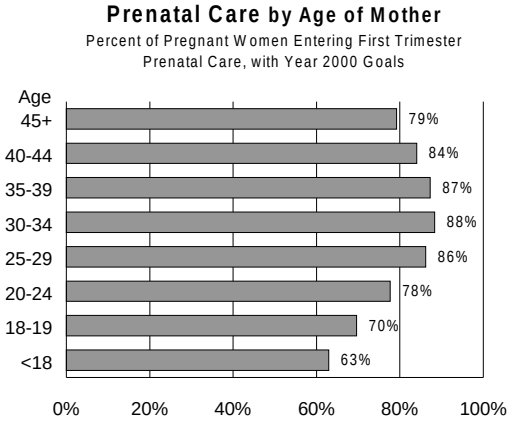
Percentages

- 56 .9 to 69 .9
- 70 .0 to 76 .8
- 76 .9 to 81 .9
- 82 .0 to 90 .5

State Average: 76.9 %
National Rate: 77.7 % (1992)

Age

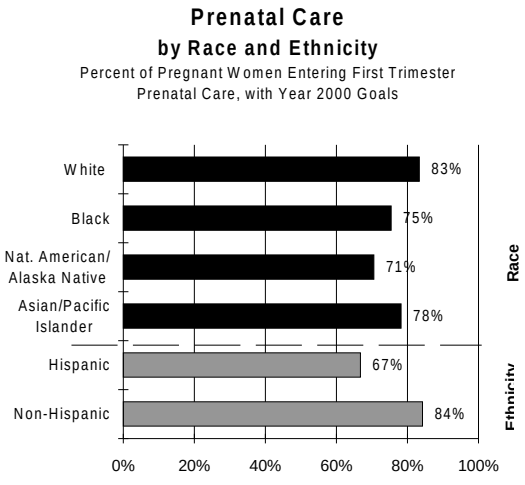
Teen mothers are least likely to receive early prenatal care. In 1994 in Washington, of all teens under the age of 18 giving birth, only 63% entered care in the first trimester. Women age 30-34 had the highest percent of first trimester entry (88%).



Race and Ethnicity

African-American and Native American women generally enter prenatal care later than Caucasian and Asian/Pacific Islander women. Hispanic women enter prenatal care later than non-Hispanic women.

Underlying factors such as socioeconomic status and health beliefs may better explain prenatal care initiation differences between racial groups.



Income and Education

The percent of women entering prenatal care in the first trimester is significantly lower for women who did not graduate from high school (66%) than for those who finished high school (82%), and those with some college (90%). It should be noted that those not completing high school include many teen mothers.

Women of lower income, as well, are less likely to enter prenatal care in the first trimester of pregnancy. One measure of low income is the receipt of Medicaid services. In 1994, 90% of non-Medicaid women entered prenatal care in the first trimester, compared to 70% of Medicaid women.

Unmarried mothers are also more likely to have low income and are less likely to receive early prenatal care. In 1994, 70% of unmarried mothers entered early care, compared to 87% of those who were married.

Other Measures of impact and burden

Early entry into prenatal care is no guarantee, by itself, of good birth outcomes. The care should be ongoing throughout pregnancy. Studies suggest that early and continuous prenatal care improves nutrition status and increases weight gain, length of pregnancy, and birth weight.[2] The strongest effect of this is noted among low income and socially high risk populations. For example, access to prenatal care has improved since Washington's maternity care access program, First Steps, began in 1989. Those entering late are at greater risk for poor pregnancy outcomes and represent the most difficult group to reach.

Risk and Protective Factors

It is clear that multiple factors influence prenatal care initiation and use. Barriers to early prenatal care include:

Financial/economic. The most frequently cited barrier is lack of affordable prenatal care. Based on the PRAMS survey, it is estimated that over 20% (±5) of women statewide giving birth in 1993-1994 had no money to pay for care.

Women are often part-time or seasonable employees and therefore are often uninsured or underinsured. Insurance-related issues include waiting periods, high co-payments and deductibles, and limitations of covered services.[3]

Gaps between public and private insurance can cause lack of coverage or delays in setting up coverage. In 1994, only 69% of women who listed Medicaid as 'source of payment' on the birth cer-

tificate entered first trimester prenatal care, compared to 92% of those with commercial insurance.

System. Based on the PRAMS survey, an estimated 18% (±2.5) of women statewide could not get into prenatal care as early as they wished. System-related barriers can include negative provider attitudes, unstandarized practice, inadequate supply and distribution of providers, lack of coordination with other pregnancy services, limited information about available resources, long clinic waiting times, inadequate health care coverage, lack of transportation, and inadequate child care.

Lifestyle co-factors. Lifestyle and maternal behavior, particularly inadequate prenatal weight gain, smoking, and alcohol/drug use, play significant roles in birth outcomes. They are the major predictors of intrauterine growth retardation and preterm birth, which in turn are preventable causes of infant morbidity and mortality. Women who enter care early in pregnancy benefit from earlier detection of problems and intervention. Pregnancy is often a time when a woman is more motivated to change habits. Women who quit smoking are most likely to quit early in pregnancy.[4]

Alcohol/Substance Use. Medicaid pregnant women identified as substance users enter care at lower rates than Medicaid women not identified as substance users.[5] Possible issues include fear of legal consequences, child custody, punitive attitudes of providers, guilt regarding potential damage to infant, and lack of available female-specific drug treatment. Successful prenatal care for chemical using women includes linkages to appropriate treatment programs.

Social/Attitudinal. Personal and cultural beliefs and situations influence when women seek prenatal care. Fear, ambivalent feelings, previous bad experiences with the system, denial, lack of awareness of the symptoms of pregnancy or the importance of prenatal care, and domestic violence can all delay initiation of care.

Intendedness of Pregnancy. Unintended pregnancies include those that are unwanted or mistimed. PRAMS data show an estimated 69% (±4.5) of women whose pregnancies were unintended received early prenatal care, compared to 86% (±2.3) of those whose pregnancies were intended. Women not intending to become pregnant may be less attentive to symptoms or caught up in complicated personal situations that delay decision-making. (See Unintended Pregnancy Section)

Other Specific Protective Factors. Recent studies suggest that women who participate in family planning clinics[6] or WIC programs get prenatal care earlier.[7] Those who get tangible assistance with housing, education, child care, food and supportive counseling tend to stay in prenatal care. Women who are connected to supportive partners or families tend to seek care earlier.

High Risk Groups

Use of prenatal care is poorest for the following groups: teens under age 18; Hispanic, African American, and Native American women; women in rural areas; single women; low income families; women with less than high school education; and women who smoke, drink, or use drugs.

Contributing factors that may be associated with poor utilization of prenatal care include higher rates of poverty; unintended pregnancy; provider shortages in rural areas, shortages of providers of similar cultures and language, and less availability of transportation and child care.

Intervention Points, Strategies and Effectiveness

Despite the associations found with early entry into prenatal care and better outcomes, current research lacks clear information about what specific services offered during prenatal care are actually effective in preventing adverse outcomes. However, previous causes of infant mortality and morbidity such as Rh disease and congenital syphilis have been virtually eliminated by prenatal medical care.[8] Similar gains have been seen in reducing adverse effects of diabetes during pregnancy. Early prenatal care also improves opportunities for prenatal genetic testing and its benefits.

Financial. Programs that remove financial obstacles have increased numbers of women accessing early prenatal care. One example is Washington's First Steps program, which has been evaluated and proven successful in getting services to low-income pregnant women and reducing the numbers of high risk women receiving poor or no prenatal care. Between 1989 and 1992, the proportion of teens with late or no care declined from 14.5% to 9.8%; and the proportion of African-American women with late or no prenatal care declined from 13.1% to 8.4%.[9]

The following activities are particularly important: developing or maintaining an easy, fast application process; promoting affordable co-payment; and removing pre-existing condition clauses, waiting periods, and exclusionary policies in health insurance plans.[10]

System. Some approaches increase the capacity of the current prenatal health care system, including adequate supply and geographic distribution of diverse providers, with caseloads permitting initial appointments within two weeks.

Some studies suggest that WIC and Family Planning services improve early entry.

Other strategies include working with professional organizations and provider groups to improve practice protocols.[11] Outreach efforts target women in need of prenatal care to get them into care and to follow up on missed appointments. Efforts to promote coordination and linkages among medical care providers and other related service providers can strengthen system capacity. Other actions can assure managed care plans develop and maintain systems that promote early utilization. Several evaluations of the Washington State First Steps Program that have been independently undertaken address the impact of First Steps on prenatal care.

Social/Attitudinal. Public information and education campaigns and referral assistance have promoted early initiation of prenatal care.[12] Preventive services which enhance medical care and provide support, education and counseling will improve adequacy of prenatal care and broaden the scope of care provided. In Washington state, the Maternity Support Services (MSS) program has been associated with keeping women in care. One study states that Medicaid women receiving MSS were 19% less likely to have inadequate prenatal care.[13] Improving access to ongoing family planning services will promote reproductive awareness, reduce unintended pregnancies and reduce delays in diagnosis.[14] Effective preconception intervention includes providing information and counseling related to reproductive risks, health enhancing behaviors, and birth control options at every health care encounter with women of child bearing age.[15]

Data Sources

State birth data: (1980-1994) Washington Department of Health, Center for Health Statistics, Prepared by the DOH Maternal-Child Health Program.

National prenatal care data: Health Untied States 1994, US Department of Health and Human Services.

Survey data: Pregnancy Risk Assessment Monitoring System (PRAMS), Department of Health, Maternal-Child Health Program.

For More Information

Washington Department of Health, Division of Community-Family Health, Maternal-Child Health Program, (360)753-5870

Technical Notes

Birth certificate limitations: See technical appendix. Selection bias: See technical appendix

Endnotes:

[1] Troubling Trends Persist: Shortchanging America's Next Generation, National Commission to Prevent Infant Mortality, 1992.

[2] A Pound of Prevention: The Case for Universal Maternity Care in the US, edited by Jonathan Kotch, MD, MPH et al. APHA, Washington, DC 1992.

[3] Ibid.

[4] bid..

[5] Substance Abuse, Treatment, and Birth Outcomes for Pregnant and Postpartum Women in Washington State, WA DSHS PSDB June 1995.

[6] The Effect of Family Planning Participation on Prenatal Care Use and Low Birth Weight, Denise Jamieson and Paul Bhescher, Family Planning Perspectives, Sept./Oct. 1992, Vol. 24, No. 5.

[7] Historical Study of Pregnancy Outcomes, David Rush, MD, et al, American Journal of Clinical Nutrition, 48:412-28, American Society of Clinical Nutrition, 1988.

[8] A Pound of Prevention: The Case for Universal Maternity Care in the US, edited by Jonathan Kotch, MD, MPH et al, APHA, Washington, DC 1992.

[9] First Steps Evaluation, Frederick A. Connell, M.D., M.P.H., et al, University of Washington School of Public Health and Community Medicine, Seattle, WA., December 1995.

[10] Access to Health Care: Key Indicators for Policy, Center for Health Economics Research, Robert Wood Johnson, New Jersey, 1993.

[11].Prenatal Care: Reaching Mothers, Reaching Infants, Institute of Medicine, National Academy Press, Washington, DC 1988.

[12] Ibid.

[13] The impact of Extended Maternity Services on Prenatal Care Use Among Medicaid Women. Diana Farrow, et al, American Journal of Preventive Medicine, Volume 12, Number 2, 1996.

[14] The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families, Institute of Medicine, National Academy Press, 1995.

[15] Toward Improving the Outcome of Pregnancy, March of Dimes, 1993.